

Date: Thu, 18 Feb 93 13:37:56 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #229
To: Info-Hams

Info-Hams Digest Thu, 18 Feb 93 Volume 93 : Issue 229

Today's Topics:

 2m Beam
 Bill Clinton and military surplus
 cellular safety
 Constant 300 mhz plus signal in shop
Daily Solar Geophysical Data Broadcast for 17 February
 Delivery Failure Report
 dilemma (to drill or not to drill)
 Grace DSP-12 vs. AEA DSP-1232 ? Opinions?
Lightening arrestor for random wire SWL antenna
 Lin pot type AB?
 Looking for dc motor source
 Need help tuning TS690S
Sales tax on mail order?From: bryan.weaver@bville.gts.org (Bryan Weaver)
 Special Call Signs
 Sun spot cycle question

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 18 Feb 1993 19:58:35 GMT
From: usc!howland.reston.ans.net!gatech!rpi!cary101.its.rpi.edu!
mellob@network.UCSD.EDU
Subject: 2m Beam
To: info-hams@ucsd.edu

Wanted: 2 meter beam antenna with at least 5 elements.

-- OR --

Plans, ideas, thoughts, clues, advice, suggestions for the construction of a two meter beam antenna.

As usual, the price decides.

I'm trying to hit the 2 meter repeater on Mount Greylock in Western Massachusettes from Boston. I've been told that it's a piece of a cake if you have a beam. I don't have a beam.

Thanks in advance!

-Brett Mellor
Rensselaer Polytechnic Institute
Troy, New York

mellob@rpi.edu

Date: Thu, 18 Feb 1993 17:46:00 GMT
From: swrinde!gatech!wa4mei!ke4zv!gary@network.UCSD.EDU
Subject: Bill Clinton and military surplus
To: info-hams@ucsd.edu

In article <1993Feb18.125124.21401@cbnewsj.cb.att.com> k2ph@cbnewsj.cb.att.com (The QRP'er) writes:

>From article <1993Feb18.073301.27327@ke4zv.uucp>, by gary@ke4zv.uucp (Gary Coffman):

>> In article <1993Feb17.150150.20002@mlb.semi.harris.com>

RSUMPERL@JAGUAR.ESS.HARRIS.COM (05991 SUMPERL RP) writes:

>>> Just spoke with Bill Slep of Slep electronics (military surplus), he claims
>>>Clinton has put a halt to military surplus auctions. Has anyone else heard this?

>>

>> Let's see, Clinton has 6 letters, Billary has 6 letters, does anyone
>> know if Clinton's middle names have 6 letters? We all suspect him of
>> being the anti-Christ, can we prove it?

>

>LOTS O' STUFF DELETED

>

>Clinton has 6 letters?!? Billary has 6 letters?!?

>

>Is this the new math? :-)

Yep, capitalized letters don't count. They're in a different "set". :-) :-)

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: 18 Feb 1993 19:48:08 GMT

From: sdd.hp.com!col.hp.com!fc.hp.com!sde.hp.com!gt@network.UCSD.EDU

Subject: cellular safety

To: info-hams@ucsd.edu

I'm trying to get to some real facts about all of this cellular phone safety stuff. I saw a couple of previous articles in this group so I figured it might be a place to ask for a few opinions. I've got a few questions about the ANSI standard. (note: I'm using C95.1-1982 and I assume there is a newer rev. but haven't heard back from ANSI yet.)

Disclaimer: I know zipo about medicine.

General questions.

1. It seems to me that there is one all encompassing assumption in the ANSI spec. This is that safety levels for whole-body radiation are all that must be regulated, despite the acknowledgement of hotspots in the irradiated body. They give some rationale from the field of dosimetry about whole-body averages. They also point out the impossibility of practically measuring part-body SAR's.

Because of this, the 7W handheld radio's are allowed as a specific exemption, not because they meet the general standards. (yes, i know the cphones are .6W, just talking about the standard)

The question-

I've served on too many standards committees and am therefore inclined to wonder if this isn't just a tad too pragmatic to accommodate existing and planned products?

2. The standard requires that all measurements be made at a distance[of at least 5cm but it seems that many cellular phone antennas are a tad closer to the skull, if not the brain than this. How can one get accurate data at less than 5cm?

thanks for any help!

gt

Date: 18 Feb 93 13:03:55 -0700
From: usc!howland.reston.ans.net!gatech!destroyer!cs.ubc.ca!mala.bc.ca!
wagner@network.UCSD.EDU
Subject: Constant 300 mhz plus signal in shop
To: info-hams@ucsd.edu

Just got a new Gold Star Frequency counter, and don't know what's on the dial.

Plugged the beast in and put a short wire on the 1 ghz input. The beast shows a solid 382.8XXX (x's are variable) mhz signal. I have tried to track it down and don't know of any logical source.

It is on my test bench at the college. I turned off all computers in the area and disconnected any television cable feeds.

Am I actually getting a carrier or does this beast like to display this freq.?

I can key the portable and it switches to the proper readout.

I have a Canadian Forces Military installation about 1/2 mile away. Should I go over and tell the C/O to turn off his gear? Will it fry my grey matter? Is this the reason I hate coming to work?

--

73, Tom

=====
Tom Wagner, Audio Visual Technician. Malaspina College Nanaimo British Columbia
(604) 753-3245, Local 2226 Fax (604) 755-8742 Callsign VE7GDA

I do not recycle..... I keep everything! (All standard disclaimers apply)
=====

Date: 18 Feb 93 18:36:04 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 17 February
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 048, 02/17/93
10.7 FLUX=124.3 90-AVG=138 SSN=086 BKI=1335 6530 BAI=028
BGND-XRAY=B6.5 FLU1=5.4E+05 FLU10=1.1E+04 PKI=1335 66*2 PAI=036
BOU-DEV=006,033,031,077,132,085,020,004 DEV-AVG=048 NT SWF=01:075

XRAY-MAX= M5.8 @ 1040UT XRAY-MIN= B4.6 @ 1837UT XRAY-AVG= C2.9
NEUTN-MAX= +003% @ 0315UT NEUTN-MIN= -002% @ 2235UT NEUTN-AVG= +0.0%
PCA-MAX= +0.1DB @ 2345UT PCA-MIN= -0.7DB @ 0755UT PCA-AVG= -0.0DB
BOUTF-MAX=55423NT @ 0308UT BOUTF-MIN=55358NT @ 1500UT BOUTF-AVG=55399NT
GOES7-MAX=E:+113NT@ 0855UT GOES7-MIN=N:-026NT@ 1337UT G7-AVG=+071,+036,+006
GOES6-MAX=N:+138NT@ 0913UT GOES6-MIN=P:-084NT@ 1447UT G6-AVG=+084,+011,+045
FLUXFCST=STD:120,120,125;SESC:120,120,125 BAI/PAI-FCST=015,015,010/015,015,010
KFCST=4441 1111 2223 3232 27DAY-AP=006,005 27DAY-KP=2313 2111 0211 1223
WARNINGS=*MAJFLR;*SWF;*PROTON;*PCA
ALERTS==*MAJFLR:M5.8/SF@1040,S07W87(7420),1032-1040-1227
!!END-DATA!!

Date: 18 Feb 93 17:16:29 GMT
From: swrinde!gatech!emory!logicse!sequent!muncher.sequent.com!edw@network.UCSD.EDU
Subject: Delivery Failure Report
To: info-hams@ucsd.edu

In article <9302181232.AA20995@enet-gw.pa.dec.com> @doheny.enet.DEC.COM
(doheny::mrgate::newprta1::postmaster) writes:
>From: NAME: Mail Postmaster
> FUNC:
> TEL: <POSTMASTER AT NEWPRTA1 at DOHENY at
TUS>
>To: "Info-Hams@UCSD.Edu"@DECWRL@MRGATE
>
> ALL-IN-1 was unable to deliver your message dated to
^^^^^^

See what happens when you use VMS,
Move to open systems and get your mail delivered
:-)
Ed
--

-- I think I've got the hang of it now :w :q :wq :wq! ^d X exit ^X^C ~.
^[x X Q :quitbye CtrlAltDel ~~q :~q logout save/quit :!QUIT ^[zz ^[ZZ
ZZZZ ^H ^@ ^L ^[c \$q ^# ^E ^X ^I ^T ? help helpquit ^D ^d ^C ^c help
^]q exit ?Quit ?q anybackbone!sequent!edw edw@sequent.COM KA9AHQ 28.340

Date: 18 Feb 93 08:33:40 -0700
From: sdd.hp.com!saimiri.prima.wisc.edu!caen!destroyer!cs.ubc.ca!mala.bc.ca!
wagner@network.UCSD.EDU
Subject: dilemma (to drill or not to drill)
To: info-hams@ucsd.edu

In article <MOSBROOK.93Feb16201248@beach.csulb.edu>, mosbrook@csulb.edu (Brent

Mosbrook) writes:

```
>
> I just bought a new truck, and am itching to install my radio in it.. the
> problem is that I am debating about whether or not to drill a hole and put an
> antenna through the roof, or if I should just use a mag-mount.
> can anyone tell me what they have done to fill said hole once they sold the
> vehicle, and/or what the effects were on resale value?
> any new, innovative ideas regarding patching the hole if need be?
>
> --
> +-----+
> | Brent Mosbrook      KC6MWK      |
> | mosbrook@csulb.edu  |
> +-----+
```

Personally I'd go out and get a cheap Cell Phone antenna and stick it in the hole. It would probably enhance the value of the vehicle if a Yuppie (are they still around) bought it.

--

73, Tom

```
=====
Tom Wagner, Audio Visual Technician.  Malaspina College Nanaimo British Columbia
(604) 753-3245, Local 2226  Fax (604) 755-8742  Callsign VE7GDA
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I do not recyle..... I keep everything! (All standard disclaimers apply)

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Date: 18 Feb 93 18:19:00 GMT
From: idacrd!tang!n4hy@uunet.uu.net
Subject: Grace DSP-12 vs. AEA DSP-1232 ? Opinions?
To: info-hams@ucsd.edu

To Michael Katzman:

RE HF modems in PK-232, DSP12/2232:

You are wrong about the AEA PK-232. It has 8 pole filters in its discriminator. The filters in the DSP1232 and DSP2232 are much better than these. They are linear phase symmetric FIR filters designed by windowing with a window that I designed as being right for the job. You can get similar filters by using other peoples windowing functions or by using the standard Parks McClellan design algorithm. The reason I use windowing is that you get better skirts and since the filters are so long I got nearly flat response in the passband anyway. In the DSP box there is a complex PLL. PLL's have gotten a bad reputation because of the implementations (doing stupid stuff like using EXAR 2211 chips) and not

designing the loop gains, etc. properly. I use an analytic representation of the signal and this removes the high frequency parts from the error detector so that the error signal can be fed directly, without group delay caused by a ridiculous low pass filter to a frequency tracker which has a sensible low pass filter. The data filters are very strong. They are long FIR's and have very steep cutoff's. To improve the modems in the DSP2232/1232 one needs to be able to adjust the DATA detect and Carrier detect thresholds and a couple of other things to optimize performance for your particular radio. The last thing I was working on prior to parting ways with AEA was an upgrade to the interprocessor dialogue to allow the user to set these constants via the command line.

There is no need for 16 bit A/D's and D/A's in amateur radio equipment. There is not 90 dB of dynamic range available out of the audio amplifier circuits in most transceivers and there certainly isn't enough dynamic range or linearity in the microphone amplifiers in most of these radios to justify 16 bit D/A's. This is the fallacy in the use of the expensive parts in CLOVER II FOR AMATEUR RADIO USE. I am sure that they are targeting commercial markets where they MIGHT be able to use this dynamic range. You pay for the 16 bit parts. One of the things (for example) that CLOVER is able to do that the AEA box cannot is optimize the analog front end for the application. The AEA box has recent art programmable filters for anti-aliasing and reconstruction filtering but they are not as good as DEDICATED one-application optimized filters. The DSP2232/1232 is addressing a different audience. Those who want to 'do everything' with one box. The AEA boxes and the DSP-12 both have 12 bit A/D's and D/A's. AEA owns the rights to the schematics and could make them available but I have no information as to whether or not they are doing this.

BMc

--

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-----
Robert W. McGwier          | Bob's interests include amateur radio,
Institute for Defense Analyses | astronomy, and golf (10 handicap fanatic)
Center for Communications Research | Asst. Scoutmaster BSA Troop 5700
Princeton, N.J. 08520      | n4hy@ccr-p.ida.org (internet)
-----
```

Date: Thu, 18 Feb 1993 19:26:06 GMT
From: sdd.hp.com!hpscit.sc.hp.com!icon.rose.hp.com!greg@network.UCSD.EDU
Subject: Lightening arrestor for random wire SWL antenna
To: info-hams@ucsd.edu

Why not use one of those Twinlead TV type lightning arrestors, connecting your antenna wire to one terminal. Due to the volume, they're lots cheaper than a coax unit, and are designed for receive-only.

I used one for years like this, but since we're in a low lightning risk area, I don't know if it ever did anything. At least, nothing broke.

Greg KD6KGW

Date: 18 Feb 1993 18:02:19 GMT
From: agate!darkstar.UCSC.EDU!cats.ucsc.edu!haynes@ames.arpa
Subject: Lin pot type AB?
To: info-hams@ucsd.edu

As several people have mentioned, Allen-Bradley makes an excellent quality 2-watt pot, and has since at least the 1940s. They call it Type J. For a while at least, and maybe they still do, Ohmite made a similar style of pot, and they called it Type AB, no doubt in deference to Allen-Bradley. You find these new in catalogs of industrial-type suppliers such as Allied and Newark. You also find them at surplus stores which handle surplus from industrial and military type equipment makers.

There are probably several other companies that make pots of equivalent quality, since they are made to some military spec. It just struck me as interesting and unusual that here is a product design dating back 50 years or more and still in current production.

--
haynes@cats.ucsc.edu
haynes@cats.bitnet

"Ya can talk all ya wanna, but it's dif'rent than it was!"
"No it aint! But ya gotta know the territory!"
Meredith Willson: "The Music Man"

Date: Thu, 18 Feb 1993 18:44:57 GMT
From: usc!howland.reston.ans.net!agate!pasteur!etch-eshop.Berkeley.EDU!ron@network.UCSD.EDU
Subject: Looking for dc motor source
To: info-hams@ucsd.edu

HI

I'm not sure that this belongs here, but I thought it would be a good place to ask.

Does anyone know of a source for surplus/used D.C. motors? I'm looking

for something in the 10 - 20 hp range, series wound with an operating voltage around 100 volts.

I'm looking into the possibility of converting a small car to electric power.

Thanks

Ron Viegelahn

ron@etcheshop.Berkeley.EDU

Date: 18 Feb 93 13:33:09 EST
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa
Subject: Need help tuning TS690S
To: info-hams@ucsd.edu

Tom & David-

Since you both have the TS690S, I wonder if you would each comment on some things I've noticed about mine.

Yesterday, I noticed that a station on ten meters had somewhat distorted audio. The distortion cleared up when I activated the input attenuator. This nearby station had a strong signal, about 20 or 30 over S-9, but certainly didn't peg the meter. I am surprised that the receiver would overload like that, since I've never seen it on several other rigs.

I also noticed that the ALC reading was low on ten meters, after the microphone level had been set on forty meters. While I have observed that on older rigs, I am disappointed to find it on the TS-690!

Although I seldom use AM, I recently found that the antenna tuner won't autotune on AM. There is a note in the owner's manual stating that it won't tune if the carrier is turned all the way down. However, mine won't successfully autotune if carrier is only 50% down for AM.

Has anyone noticed these effects on their TS-690's or TS-450's? If so, was there anything you could do about it? Is there any internal adjustment that might improve the performance in these areas?

Thanks for any response.

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

Date: Thu, 18 Feb 1993 19:31:27 GMT
From: usc!sdd.hp.com!hpscit.sc.hp.com!icon.rose.hp.com!greg@network.UCSD.EDU
Subject: Sales tax on mail order?From: bryan.weaver@bville.gts.org (Bryan Weaver)
To: info-hams@ucsd.edu

bryan.weaver@bville.UUCP wrote:

:
: Strictly speaking, the buyer is probably supposed to voluntarily pay
: their state the tax! *<gg>*
: ---

Yes, in fact there's a statement to this effect in the CA State income tax instruction book. They even ask that you report the company to the State!

Yeah, right.

Greg.

Date: Thu, 18 Feb 1993 20:21:13 GMT
From: usc!wupost!darwin.sura.net!convex!news.utdallas.edu!feenix.metronet.com!marchbg@network.UCSD.EDU
Subject: Special Call Signs
To: info-hams@ucsd.edu

Any one heard anything yet on things that the FCC plans to do with issuing special call signs, i.e.i, re-issuing old and expired 1x2s, 2x1s, or 1x3s? tnx and 73

--

Marc Grant | Internet: marchbg@feenix.metronet.com
POB 850472 | Packet: n5mei@n5ldd.#ntx.tx.usa.na
Richardson, TX 75085-0472 | Amateur Radio Station N5MEI

Date: Thu, 18 Feb 1993 20:56:05 GMT
From: sdd.hp.com!hp-cv!hp-pcd!hpcvaac!billn@network.UCSD.EDU
Subject: Sun spot cycle question
To: info-hams@ucsd.edu

erchul@csd4.csd.uwm.edu (David A. V. Erchul) writes:

:
: I would be very appreciative if someone could explain the 11 year
: sun spot cycle and how it interferes with radio transmissions.
:
:
: At certain periods of time I gave up on my radio because of all
: the noise (static) that was so high it covered up most of the
: people that I was trying to talk to. I was told it had to do
: with the 11 year sun spot cycle. For all I know that person
: may have well just given me a snow job...
:
: As I said any/all elplaination(s) will be appreciated!

It all comes down to ionospheric ionization. Look in any book on
wave propogation - such as a Radio Amateur's Handbook - for an
explanation. You will be able to find suitable references in any
library.

Bill

Date: 18 Feb 1993 12:54:12 -0500
From: usc!howland.reston.ans.net!newsserver.jvnc.net!yale.edu!qt.cs.utexas.edu!
news.Brown.EDU!noc.near.net!genrad.com!genrad.com!not-for-mail@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1993Feb12.185518.17617@sbc.sunysb.edu>,
<1lolhpINNq2@quasar.genrad.com>, <1993Feb15.192343.18347@mprgate.mpr.ca>.net
Subject : Re: kits - subject to type acceptance, or not?

David Vanderbyl writes:

>>Yes I know it was awfully silly of me to use this 75 ohm resistor even though
>>they told me not to but.....

>So you screwed up your kit and then want it to be fixed on warranty?

>>I returned the Amplifier and called Visa to stop the payment.The people at
>>Visa were astounded that CCI were doing this stuff and promptly credited
>>my account.

>This is interesting, as I have seen TV programs where it was said that
>using Visa was like using cash. i.e. no stop payments were allowed.
>Hmmm....

Well David as you put it so directly yes I did screw up the kit and yes I did expect some positive response from CCI because :

1. They did not tell me when I ordered the Amplifier Kit that it was 'nt Kit - I asked if everything was included when I ordered the 'Kit' and was assured that even the Ferrite RF transformers were pre-wound.
2. It was not explained to me at the time of my purchase that as I was only buying a 'Full component set' and not a Kit that any warranty on the components was invalidated immediately they were soldered. I fully understand that if I buy any components from anybody anywhere and then they smoke that in most cases you're out of luck BUT if I buy a complete set of components which when assembled together make something I do expect it to work as advertised.

These people at Communications Concepts Inc are avoiding the FCC type acceptance burden by hiding behind semantics and mis-information.

Consequently because of this they benefit even more by avoiding warranty issues because the FCC regulations prohibit them from selling 'Kits'.

Neat huh?

I have built many many kits in various parts of the world and in virtually all cases have been provided with the correct components to do the job - even though some of the components were changed in the kit but not documented in the accompanying paperwork.

But to be provided with a component that is *known* to self destruct the kit - sorry 'full component set' - and then be told 'no warranty' because its a component is unique to these people at CCI.

The people at Visa were provided with all the paperwork and were equally amazed when they read the 'Hint' sheet. The guy I spoke to summed it up quite well when he asked me:

"You mean to say CCI sell you all the components to make something and include a part that they know destroys it and even tell you it destroys it and when it breaks they refuse to fix it because they're no warranty on the parts when you use them to build what you paid for ?" "Yup!"

I received a full credit from Visa.

73 Trevor G3WQO AB5EU still exiled in Texas....

Date: Thu, 18 Feb 1993 19:35:02 GMT
From: usc!howland.reston.ans.net!sol.ctr.columbia.edu!usenet.ucs.indiana.edu!
reid.ucs.indiana.edu!reid@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1lsqjeINNk3k@chnews.intel.com>, <1993Feb17.143657.20164@seas.gwu.edu>,
<C2MK03.32@news.cso.uiuc.edu>
Subject : Re: FAA Radar power?

In article <C2MK03.32@news.cso.uiuc.edu> jtg0707@uxa.cso.uiuc.edu (Jui Tien)
writes:

>biby@seas.gwu.edu (Rich Biby) writes:

>.....deleted.....

>>Yah, 7.5 Megawatts. But don't forget about gain!

>>We were working against a zoning board regarding RF

>>expsoure and had to check a couple of these things

>>out completely. My mouth just hung open when I found

>>out it was 6-some-odd Megawatts with about 25 dB gain!

>

>>I think I would freek out if I was ever close enough

>>to one to see it with my own eyes...

>

>Is there any major health hazards working with equipments at that frequency

>range? Anyone out there have any experiences with radar equipments?

>Safety tips. (At much lower power, of course.:))

I remember an article in an old _Popular Electronics_ magazine (ca. 1959)
about the DEW (Distant Early-Warning) line, a series of very powerful radar
stations deployed in northern Canada and Alaska to watch for incoming
missiles. There was a picture of someone wearing a special suit to protect
against rf when working near the antenna. The article also mentioned that
guys would stand in front of the antennas to get warm (!), and suffered no
apparent ill effects except a slight increase in the incidence of eye
cataracts. Of course, that was in the days when rf was theoretically not
harmful. (Neutrons were once thought to be harmless because they are not
ionizing radiation. A local cyclotron once sent their excess neutrons into
the frat house next door, but that's another story. :-)

They say rf doesn't do anything to you, but when I go to the Dayton hamfest
and observe some of the folks there, it sure makes me wonder! %-)

--

Frank W9MKV reid@ucs.indiana.edu

End of Info-Hams Digest V93 #229
